



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,364	03/08/2002	Wolfgang Sautter	197.022/010111942	7867

7590

03/24/2005

Robert J Koch
Fulbright & Jaworski
801 Pennsylvania Avenue N W
Washington, DC 20004-2615

EXAMINER

HARVEY, DAVID E

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/018,364	Applicant(s) SAUTTER ET AL.	
	Examiner DAVID E HARVEY	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-37 is/are allowed.
- 6) ☒ Claim(s) 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2614

1. Sano [US #5,697,083], Kinoshita [US #4,079,318], Iwasaki [5,513,222], and Oshima et al. [US #5,933,466] all illustrate conventional diversity receiving systems in which a plurality of received signals are received, phase aligned, scaled, and added together to form a combined signal.

Hotta et al. [JP 8-23484] has been cited because it illustrates a diversity receiving system for a TV signal in which the phase of the respective IF TV signal are adjusted to maximize the amplitude of the resulting summed combined/summed.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2614

3. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima et al. [US #5,933,466].

1) As is shown in figure 2, Oshima et al. disclose circuitry for allowing the mobile reception of broadcast signals, wherein said system comprises:

a) A clock generator (@ 40);

b) A synchronization "unit" including first delay circuitry (@ 22 (a-d)) for locking the timing of each of the received signals to the timing of a generated clock signal (i.e. CK1);

c) A signal conditioning unit that includes

1. Signal evaluation circuitry (@ 25 (a-d)) which indirectly "subjects" each of the synchronized signals to an evaluation process;

2. "Means" (@ 50), following the evaluation circuitry for forming weighting factors therefrom; and

3) Second delay circuitry (51 (a-c)) having a storage depth "corresponding" ¹ to the signal evaluation and weighting factor formation period (note lines 50-60 of column 6);

d) Multiplication (@ 24 (a-d)) and summing (@ 30) "means" for forming and outputting an combined output signal (@ RD); and

e) A receiver (not shown) for receiving and displaying the signal (@ RD) that is communicated to it from the output of the multiplication and summing "means".

2) Claim 38 differs from the showing of Oshima et al. only in that:

a) The first and second delay circuits are not explicitly identified as FIFO memories; and

b) Oshima et al. is not explicitly describe/show a "synchronization control unit".

3) Obviousness:

a) The first and second delay circuits shown in figures 2 and 3 of Oshima et al. obviously comprise respective shift register arrangements (i.e. FIFO memories) as is evident by the fact that they are controlled by applied clocking signals; and

b) While claim 38 recited a "synchronization control unit", claim 38 fails to relate said recited "unit" to any of the other structure that is being recited in the claim. Thus, the limitation is met merely by the fact that "synchronization control units" of many kinds/types existed and were notoriously well known in the art. Further, while not needed, the examiner maintains that some type of "synchronization control unit" was inherent part of the reception circuitry (21(a-d)) and/or the detecting circuitry (23 (a-b)) of Oshima et al.

4. Claims 19-37 are allowed.

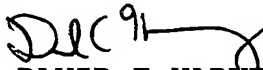
¹ The delay "corresponds" to the recited time period because it is an equalizing delay that is equal to the difference between said recited period

Art Unit: 2614

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E HARVEY whose telephone number is (571) 272-7345. The examiner can normally be reached on M-F from 6am to 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DAVID E HARVEY
Primary Examiner
Art Unit 2614

and the processing delay that occurs in the signaling channel.